

ORDER

FEDERAL AVIATION AGENCY WESTERN REGION

WE 6630.8A

3/9/67

FA-5530 VHF/UHF DIRECTION FINDER, INSTALLATION AND ALIGNMENT OF TIME
SUBJ: DOMAIN FILTER MODEL 5001

1. PURPOSE. This Order outlines procedures for installing and aligning the Model 5001 Time Domain Filter and Bearing Evaluation Monitor used in conjunction with the FA-5530 VHF/UHF Direction Finder. It applies to Area Airway Facilities maintenance personnel where this Direction Finder is already installed, and to installation personnel installing this equipment.
2. CANCELLATION. WE 6630.8, FA-5530 VHF/UHF Direction Finder, Installation and Adjustment of Time Domain Filter, Model 5001, is cancelled.
3. REFERENCES.
 - a. Figure 29, Sheets 2 and 4 of Volume 1 of FA-5530 Instruction Book.
 - b. Time Domain Filter and Bearing Evaluation Monitor, Model 5001 Instruction Book.
4. PROCEDURE. Install the Time Domain Filter and Bearing Evaluation Monitor Model 5001 in accordance with instructions contained in the Instruction Book in Chapter 2 entitled Installation. NOTE: Disregard Step C of paragraph 2.2.4 as the FA-5530 Direction Finder will not operate properly at this point without the Time Domain Filter Unit. This condition is due to the AGC circuit being disconnected in the VHF front end when action required in paragraph 2.2.2c is completed.
5. ALIGNMENT. The alignment of the Model 5001 Time Domain Filter and Bearing Evaluation Monitor requires use of test equipment listed in Table 5-1 of the Instruction Book. A single trace oscilloscope may be substituted but it must be capable of time base measurement and it must be connected so that the GATE TRIGGER output at TP-1 is used to trigger the SYNC. Alignment procedure is as outlined in the Instruction Book, Chapter 5, paragraphs 5.3.2 and 5.3.3 with the following note and correction:
 - a. Paragraph 5.3.2.h. Adjustment of R21 for a GATE AMPLITUDE of -3.8 volts will result in correct operation of the Time Domain Filter. It will be necessary to readjust the receiver squelch threshold level after completing this adjustment. When making receiver signal to noise measurements after installation of the Time Domain Filter, *

Distribution: M-1, MAF-2, ZAF-8, ZAF-9, ZAF-35,
RAF-2, WE-430 (10 copies)

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* it will be necessary to first turn the power switch of the filter unit to the "OFF" position.

b. Steps c and d of paragraph 5.3.3 refer erroneously to R55. The correct designation is R53.

6. FLIGHT CHECK REQUIREMENTS. Correct installation and adjustment of the Time Domain Filter and Bearing Evaluation Monitor unit makes no change in bearing information presented by the FA-5530 equipment. A flight check will not be required before placing the FA-5530 Direction Finder into service after installation of the Time Domain Filter and Bearing Evaluation Monitor, provided the bearing of local target transmitters is the same before and after installation.

7. RESULTS. The Time Domain Filter and Bearing Evaluation Monitor, used in conjunction with the FA-5530 Direction Finder will minimize interference from local transmitters near the Direction Finder Antenna and will also prevent display of any ambiguous bearings resulting from off-channel signals.

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APPROVED WESTERN REGION MARCH 9, 1967

